

**WHAT IS CLAIMED IS:**

1. A user authentication method for performing authentication of an identity of a user of an information terminal device when the user receives a service from a service providing server via a network, the user authentication method comprising the steps of:

capturing an iris image of the user himself/herself in advance and storing and registering the iris image as registration iris image data in at least one of the information terminal device and the service providing server;

transmitting a current password defined individually for the user from the information terminal device to the service providing server, capturing a current iris image of the user by an imaging means provided in the information terminal device, and generating current iris image data in the information terminal device when the user receives a service from the service providing server by the information terminal device;

comparing thereafter by the service providing server the current password transmitted from the information terminal device with a password stored in the service providing server, and comparing the current iris image data with the registration iris image data by at least one of the information terminal device and the service providing server to thereby authenticate the identity of the user based on comparison results thereof; and

updating automatically thereafter by one of the information terminal device and the service providing server the password to generate a new password to be used when a next service is provided, transmitting the new password to the other of the information terminal device and the service providing server, and storing the same new password in both the information terminal device and the service providing server.

2. A user authentication system for performing authentication of an identity of a user of an information terminal device between the information terminal device and a service providing server connected via a network when the user receives a service from the service providing server,

wherein said service providing server comprises:

a password updating means for performing automatic update of a password every time a service is provided to the user to thereby generate a new password to be used when a next service is provided;

5 a server-side password storing means for storing the new password generated by the automatic update performed by said password updating means;

a new password transmitting means for transmitting the new password generated by the automatic update performed by said password updating means to said information terminal device;

10 a current password receiving means for receiving a current password transmitted from said information terminal device;

a password comparing means for comparing the current password received by said current password receiving means with a password before the automatic update stored in said server-side password storing means;

15 a registration iris image data storing means for storing and registering an iris image of the user himself/herself which is captured in advance as registration iris image data;

a current iris image data receiving means for receiving current iris image data transmitted from said information terminal device; and

20 an iris image data comparing means for comparing the current iris image data received by said current iris image data receiving means with the registration iris image data stored in said registration iris image data storing means, and

wherein said information terminal device comprises:

25 a current password transmitting means for transmitting the current password to said service providing server;

a new password receiving means for receiving the new password transmitted from said service providing server;

30 a terminal-side password storing means for storing the new password received by said new password receiving means;

an imaging means for capturing a current iris image of the user; and

a current iris image data transmitting means for transmitting the

current iris image data obtained by capturing by said imaging means to said service providing server.

3. A user authentication system for performing authentication of an identity of a user of an information terminal device between the information terminal device and a service providing server connected via a network when the user receives a service from the service providing server,

wherein said service providing server comprises:

a new password receiving means for receiving a new password transmitted from said information terminal device;

a server-side password storing means for storing the new password received by said new password receiving means;

a current password receiving means for receiving a current password transmitted from said information terminal device;

a password comparing means for comparing the current password received by said current password receiving means with a password before automatic update stored in said server-side password storing means;

a registration iris image data storing means for storing and registering an iris image of the user himself/herself which is captured in advance as registration iris image data;

a current iris image data receiving means for receiving current iris image data transmitted from said information terminal device; and

an iris image data comparing means for comparing the current iris image data received by said current iris image data receiving means with the registration iris image data stored in said registration iris image data storing means, and

wherein said information terminal device comprises:

a current password transmitting means for transmitting the current password to said service providing server;

a password updating means for performing automatic update of a password every time the user receives a service to thereby generate a new password to be used when the user receives a next service;

a terminal-side password storing means for storing the new password

generated by the automatic update performed by said password updating means;

a new password transmitting means for transmitting the new password generated by the automatic update performed by said password updating means to said service providing server;

an imaging means for capturing a current iris image of the user; and

a current iris image data transmitting means for transmitting the current iris image data obtained by capturing by said imaging means to said service providing server.

4. A user authentication system for performing authentication of an identity of a user of an information terminal device between the information terminal device and a service providing server connected via a network when the user receives a service from the service providing server,

wherein said service providing server comprises:

a password updating means for performing automatic update of a password every time a service is provided to the user to thereby generate a new password to be used when a next service is provided;

a server-side password storing means for storing the new password generated by the automatic update performed by said password updating means;

a new password transmitting means for transmitting the new password generated by the automatic update performed by said password updating means to said information terminal device;

a current password receiving means for receiving a current password transmitted from said information terminal device; and

a password comparing means for comparing the current password received by said current password receiving means with a password before the automatic update stored in said server-side password storing means, and

wherein said information terminal device comprises:

a current password transmitting means for transmitting the current password to said service providing server;

a new password receiving means for receiving the new password

transmitted from said service providing server;

a terminal-side password storing means for storing the new password received by said new password receiving means;

5 a registration iris image data storing means for storing and registering an iris image of the user himself/herself which is captured in advance as registration iris image data;

an imaging means for capturing a current iris image of the user; and

10 an iris image data comparing means for comparing current iris image data obtained by capturing by said imaging means with the registration iris image data stored in said registration iris image data storing means.

5. A user authentication system for performing authentication of an identity of a user of an information terminal device between the information terminal device and a service providing server connected via a network when the user receives a service from the service providing server,

15 wherein said service providing server comprises:

a new password receiving means for receiving a new password after automatic update transmitted from said information terminal device;

a server-side password storing means for storing the new password received by said new password receiving means;

20 a current password receiving means for receiving a current password transmitted from said information terminal device; and

a password comparing means for comparing the current password received by said current password receiving means with a password before the automatic update stored in said server-side password storing means, and

25 wherein said information terminal device comprises:

a current password transmitting means for transmitting the current password to said service providing server;

30 a password updating means for performing automatic update of a password every time the user receives a service to thereby generate a new password to be used when the user receives a next service;

a terminal-side password storing means for storing the new password generated by the automatic update performed by said password updating

means;

a new password transmitting means for transmitting the new password generated by the automatic update performed by said password updating means to said service providing server;

5 a registration iris image data storing means for storing and registering an iris image of the user himself/herself which is captured in advance as registration iris image data;

an imaging means for capturing a current iris image of the user; and

10 an iris image data comparing means for comparing current iris image data obtained by capturing by said imaging means with the registration iris image data stored in said registration iris image data storing means.

6. An information terminal device connected to a service providing server via a network, comprising:

15 a current password transmitting means for transmitting a current password to the service providing server;

a password updating means for performing automatic update of a password every time a user receives a service from the service providing server to thereby generate a new password to be used when the user receives a next service;

20 a terminal-side password storing means for storing the new password generated by the automatic update performed by said password updating means;

25 a new password transmitting means for transmitting the new password generated by the automatic update performed by said password updating means to the service providing server;

a registration iris image data storing means for storing and registering an iris image of the user himself/herself which is captured in advance as registration iris image data;

an imaging means for capturing a current iris image of the user; and

30 an iris image data comparing means for comparing current iris image data obtained by capturing by said imaging means with the registration iris image data stored in said registration iris image data storing means.

7. A service providing server connected to an information terminal device via a network, comprising:

5 a password updating means for performing automatic update of a password every time a service is provided to a user of the information terminal device to thereby generate a new password to be used when a next service is provided;

a server-side password storing means for storing the new password generated by the automatic update performed by said password updating means;

10 a new password transmitting means for transmitting the new password generated by the automatic update performed by said password updating means to the information terminal device;

a current password receiving means for receiving a current password transmitted from the information terminal device;

15 a password comparing means for comparing the current password received by said current password receiving means with a password before the automatic update stored in said server-side password storing means;

20 a registration iris image data storing means for storing and registering an iris image of the user himself/herself which is captured in advance as registration iris image data;

a current iris image data receiving means for receiving current iris image data obtained by capturing a current iris image of the user by an imaging means provided in the information terminal device; and

25 an iris image data comparing means for comparing the current iris image data received by said current iris image data receiving means with the registration iris image data stored in said registration iris image data storing means.

8. A program product for a computer to function as an information terminal device connected to a service providing server via a network, the  
30 program product comprising:

a current password transmitting means for transmitting a current password to the service providing server;

a password updating means for performing automatic update of a password every time a user receives a service from the service providing server to thereby generate a new password to be used when the user receives a next service;

5 a terminal-side password storing means for storing the new password generated by the automatic update performed by said password updating means;

a new password transmitting means for transmitting the new password generated by the automatic update performed by said password  
10 updating means to the service providing server;

a registration iris image data storing means for storing and registering an iris image of the user himself/herself which is captured in advance as registration iris image data;

an imaging means for capturing a current iris image of the user; and  
15 an iris image data comparing means for comparing current iris image data obtained by capturing by said imaging means with the registration iris image data stored in said registration iris image data storing means.

9. A program product for a computer to function as a service providing server connected to an information terminal device via a network, the  
20 program product comprising:

a password updating means for performing automatic update of a password every time a service is provided to a user of the information terminal device to thereby generate a new password to be used when a next service is provided;

25 a server-side password storing means for storing the new password generated by the automatic update performed by said password updating means;

a new password transmitting means for transmitting the new password generated by the automatic update performed by said password  
30 updating means to the information terminal device;

a current password receiving means for receiving a current password transmitted from the information terminal device;



a password comparing means for comparing the current password received by said current password receiving means with a password before the automatic update stored in said server-side password storing means;

5 a registration iris image data storing means for storing and registering an iris image of the user himself/herself which is captured in advance as registration iris image data;

a current iris image data receiving means for receiving current iris image data obtained by capturing a current iris image of the user by an imaging means provided in the information terminal device; and

10 an iris image data comparing means for comparing the current iris image data received by said current iris image data receiving means with the registration iris image data stored in said registration iris image data storing means.

10. A subject identification method for identifying a subject using an  
15 imaging means constituted by including a standard lens and a close-up lens having a focal length shorter than a focal length of the standard lens, the subject identification method comprising the steps of:

capturing a standard image of the subject in advance to store the standard image as registration standard image data in a registration standard  
20 image data storing means, and capturing a close-up image of the subject in advance to store the close-up image as registration close-up image data in a registration close-up image data storing means;

capturing a current standard image of the subject using the standard lens to generate current standard image data, and capturing a current close-up  
25 image of the subject using the close-up lens to generate current close-up image data when performing identification of the subject; and

comparing thereafter by a close-up image data comparing means the current close-up image data with the registration close-up image data stored in the registration close-up image data storing means to thereby perform  
30 identification of the subject.

11. The subject identification method according to claim 10, further comprising the step of comparing by a standard image data comparing

means the current standard image data with the registration standard image data stored in the registration standard image data storing means, along with said comparing step by the close-up image data comparing means, to thereby perform identification of the subject.

- 5 12. The subject identification method according to claim 10 or claim 11,  
wherein the subject is a person or an animal;  
wherein the standard image is a facial image capturing a substantially  
entire face of the subject; and

10 wherein the close-up image is an iris image capturing an iris of the  
subject.

13. The subject identification method according to claim 10 or claim 11,  
wherein the subject is a person or an animal;  
wherein the standard image is a hand/foot image capturing a  
substantially entire hand or foot of the subject; and

15 wherein the close-up image is a fingerprint image capturing a  
fingerprint of the subject.

14. The subject identification method according to claim 12,  
wherein an optical source noise, which is formed by reflecting a light  
source for illumination used when capturing an image, is combined into the  
20 registration close-up image data to be stored in the registration close-up  
image data storing means;

wherein, when a current close-up image of the subject is captured  
using the close-up lens, a same light source as the light source for  
illumination is used so that an optical source noise is combined into the  
25 current close-up image data; and

wherein, when the comparing step is performed by the close-up image  
data comparing means, the current close-up image data including the optical  
source noise is compared with the registration close-up image data including  
the optical source noise.

- 30 15. The subject identification method according to claim 14,  
wherein, when the current close-up image of the subject is captured  
using the close-up lens, a shape, pattern, color, or combination thereof of the

light source is updated to be changed; and

wherein, when the comparing step is performed by the close-up image data comparing means, a shape, pattern, color, or combination thereof of the optical source noise of the registration close-up image data used in the comparing step is changed according to the change in a shape, pattern, color, or combination thereof of the light source.

16. The subject identification method according to claim 15,

wherein the light source is a display portion which performs displaying on a screen; and

wherein, when the shape, pattern, color, or combination thereof of the light source is updated to be changed, a shape, pattern, color, or combination thereof of a display drawn on the screen of the display portion is changed.

17. A subject identification system for identifying a subject using an imaging means constituted by including a standard lens and a close-up lens having a focal length shorter than a focal length of the standard lens, the subject identification system comprising:

a registration standard image data storing means for storing and registering a standard image of the subject captured in advance as registration standard image data;

a registration close-up image data storing means for storing and registering a close-up image of the subject captured in advance as registration close-up image data;

a current standard image obtaining means for capturing a current standard image of the subject using the standard lens to thereby generate current standard image data;

a current close-up image obtaining means for capturing a current close-up image of the subject using the close-up lens to thereby generate current close-up image data; and

a close-up image data comparing means for comparing the current close-up image data obtained by said current close-up image obtaining means with the registration close-up image data stored in said registration close-up image data storing means.

18. The subject identification system according to claim 17, further comprising a standard image data comparing means for comparing the current standard image data obtained by said current standard image obtaining means with the registration standard image data stored in said registration standard image data storing means.

19. The subject identification system according to claim 17 or claim 18, wherein the subject is a person or an animal;  
wherein the close-up image is an iris image capturing an iris of the subject;

10 wherein a light source for illumination emitting light toward the subject when the current close-up image of the subject is captured using the close-up lens is provided; and

wherein the light source is configured to have a shape, pattern, color, or combination thereof which is updated to be changed.

15 20. The subject identification system according to any one of claim 17 to claim 19,

wherein the subject is a person or an animal;

wherein the close-up image is an iris image capturing an iris of the subject;

20 wherein a light source for illumination emitting light toward the subject when the current close-up image of the subject is captured using the close-up lens is provided; and

wherein the illumination by the light source has a same brightness as a brightness for capturing the close-up image of the subject for obtaining the registration close-up image data to be stored in said registration close-up image data storing means, and the illumination by the light source keeps a constant brightness every time the current close-up image of the subject is captured.

21. A program product for a computer to function as a subject identification system for identifying a subject using an imaging means constituted by including a standard lens and a close-up lens having a focal length shorter than a focal length of the standard lens, the program product

comprising:

a registration standard image data storing means for storing and registering a standard image of the subject captured in advance as registration standard image data;

5 a registration close-up image data storing means for storing and registering a close-up image of the subject captured in advance as registration close-up image data;

a current standard image obtaining means for capturing a current standard image of the subject using the standard lens to thereby generate  
10 current standard image data;

a current close-up image obtaining means for capturing a current close-up image of the subject using the close-up lens to thereby generate current close-up image data; and

a close-up image data comparing means for comparing the current  
15 close-up image data obtained by said current close-up image obtaining means with the registration close-up image data stored in said registration close-up image data storing means.

22. A correspondence confirmation method for confirming whether a correspondence between a person or animal and an object prepared  
20 individually for the person or animal is correct or not, the correspondence confirmation method comprising the steps of:

capturing an image of an iris or fingerprint of the person or animal in advance, converting by a converting means image data obtained by capturing into two-dimensional barcode data expressed by a two-dimensional barcode,  
25 and attaching a two-dimensional barcode on the object based on the two-dimensional barcode data;

capturing an image of an iris or fingerprint of the person or animal at a time of confirmation using an imaging means when confirming the correspondence, converting by a converting means image data at the time of  
30 confirmation obtained by capturing into two-dimensional barcode data, and reading using the imaging means two-dimensional barcode data by capturing the two-dimensional barcode attached on the object; and

comparing thereafter by a two-dimensional barcode data comparing means the two-dimensional barcode data obtained by converting the image data at the time of confirmation with the two-dimensional barcode data read from the two-dimensional barcode attached on the object to thereby confirm  
5 whether the both two-dimensional barcode data coincide with each other or not.

23. A correspondence confirmation system for confirming whether a correspondence between a person or animal and an object prepared individually for the person or animal is correct or not, the correspondence  
10 confirmation system comprising:

an imaging means for capturing an image of an iris or fingerprint of the person or animal and capturing a two-dimensional barcode attached on the object when confirming the correspondence;

a converting means for converting image data of the iris or fingerprint  
15 of the person or animal captured using said imaging means into two-dimensional barcode data;

a decoding means for reading two-dimensional barcode data from the two-dimensional barcode captured using said imaging means; and

a two-dimensional barcode data comparing means for comparing the  
20 two-dimensional barcode data obtained by converting by said converting means with the two-dimensional barcode data read by said decoding means.

24. A program product for a computer to function as a correspondence confirmation system for confirming whether a correspondence between a person or animal and an object prepared individually for the person or animal  
25 is correct or not, the program product comprising:

an imaging means for capturing an image of an iris or fingerprint of the person or animal and capturing a two-dimensional barcode attached on the object when confirming the correspondence;

a converting means for converting image data of the iris or fingerprint  
30 of the person or animal captured using said imaging means into two-dimensional barcode data;

a decoding means for reading two-dimensional barcode data from the

two-dimensional barcode captured using said imaging means; and

a two-dimensional barcode data comparing means for comparing the two-dimensional barcode data obtained by converting by said converting means with the two-dimensional barcode data read by said decoding means.

- 5 25. An object confirmation method for confirming whether or not an object prepared individually for a person or animal is genuine or which person or animal the object is prepared for, the object confirmation method comprising the steps of:

capturing an image of an iris or fingerprint of the person or animal in  
10 advance, converting by a converting means image data obtained by capturing into two-dimensional barcode data expressed by a two-dimensional barcode, storing the two-dimensional barcode data in a two-dimensional barcode data storing means, and attaching a two-dimensional barcode on the object based on the two-dimensional barcode data;

15 reading using an imaging means two-dimensional barcode data by capturing the two-dimensional barcode attached on the object when confirming whether or not the object is genuine or which person or animal the object is prepared for; and

comparing thereafter by a two-dimensional barcode data comparing  
20 means the two-dimensional barcode data read from the two-dimensional barcode attached on the object with the two-dimensional barcode data stored in the two-dimensional barcode data storing means to thereby confirm whether the both two-dimensional barcode data coincide with each other or not.

- 25 26. An object confirmation system for confirming whether or not an object prepared individually for a person or animal is genuine or which person or animal the object is prepared for, the object confirmation system comprising:

a converting means for converting image data of an iris or fingerprint  
30 of the person or animal captured in advance into two-dimensional barcode data;

a two-dimensional barcode data storing means for storing the two-

dimensional barcode data obtained by said converting means;

an imaging means for capturing a two-dimensional barcode attached on the object at a time of the confirmation;

5 a decoding means for reading two-dimensional barcode data from the two-dimensional barcode captured using said imaging means; and

a two-dimensional barcode data comparing means for comparing the two-dimensional barcode data read by said decoding means with the two-dimensional barcode data stored in said two-dimensional barcode data storing means.

10 27. A program product for a computer to function as an object confirmation system for confirming whether or not an object prepared individually for a person or animal is genuine or which person or animal the object is prepared for, the program product comprising:

15 a converting means for converting image data of an iris or fingerprint of the person or animal captured in advance into two-dimensional barcode data;

a two-dimensional barcode data storing means for storing the two-dimensional barcode data obtained by said converting means;

20 an imaging means for capturing a two-dimensional barcode attached on the object at a time of the confirmation;

a decoding means for reading two-dimensional barcode data from the two-dimensional barcode captured using said imaging means; and

25 a two-dimensional barcode data comparing means for comparing the two-dimensional barcode data read by said decoding means with the two-dimensional barcode data stored in said two-dimensional barcode data storing means.

28. An object confirmation method for confirming whether or not two types of objects prepared individually for a person or animal are objects prepared for the same person or animal, the object confirmation method  
30 comprising the steps of:

capturing an image of an iris or fingerprint of the person or animal in advance, converting by a converting means image data obtained by capturing



into two-dimensional barcode data expressed by a two-dimensional barcode, and attaching a same two-dimensional barcode on both the two types of objects based on the two-dimensional barcode data;

5 reading using an imaging means respective two-dimensional barcode data by capturing the respective two-dimensional barcodes attached on the two types of objects when confirming whether or not the two types of objects are the objects prepared for the same person or animal; and

10 comparing thereafter by a two-dimensional barcode data comparing means the two-dimensional barcode data read from the respective two-dimensional barcodes attached on the two types of objects with each other to thereby confirm whether the both two-dimensional barcode data coincide with each other or not.

29. An object confirmation system for confirming whether or not two types of objects prepared individually for a person or animal are objects prepared for the same person or animal, the object confirmation system comprising:

an imaging means for capturing respective two-dimensional barcodes attached on the two types of objects at a time of the confirmation;

20 a decoding means for reading respective two-dimensional barcode data from the respective two-dimensional barcodes captured using said imaging means; and

a two-dimensional barcode data comparing means for comparing the two-dimensional barcode data read by said decoding means with each other.

30. A program product for a computer to function as an object confirmation system for confirming whether or not two types of objects prepared individually for a person or animal are objects prepared for the same person or animal, the program product comprising:

an imaging means for capturing respective two-dimensional barcodes attached on the two types of objects at a time of the confirmation;

30 a decoding means for reading respective two-dimensional barcode data from the respective two-dimensional barcodes captured using said imaging means; and

a two-dimensional barcode data comparing means for comparing the two-dimensional barcode data read by said decoding means with each other.

31. A subject identification method for identifying a subject using an imaging means, the subject identification method comprising the steps of:

5 capturing an iris image of the subject in advance and storing the iris image as registration iris image data in a registration iris image data storing means, and capturing a fingerprint image of the subject and storing the fingerprint image as registration fingerprint image data in a registration fingerprint image data storing means;

10 capturing a current iris image of the subject using the imaging means to generate current iris image data, and capturing a current fingerprint image of the subject using the imaging means to generate current fingerprint image data when identifying the subject; and

15 comparing thereafter by an iris image data comparing means the current iris image data with the registration iris image data stored in said registration iris image data storing means, and comparing by a fingerprint image data comparing means the current fingerprint image data with the registration fingerprint image data stored in said registration fingerprint image data storing means to thereby identify the subject.

20 32. The subject identification method according to claim 31,

wherein an optical source noise, which is formed by reflecting a light source for illumination used when capturing an image, is combined into the registration iris image data to be stored in the registration iris image data storing means;

25 wherein, when a current iris image of the subject is captured using the imaging means, a same light source as the light source for illumination is used so that an optical source noise is combined into the current iris image data; and

30 wherein, when the comparing step is performed by the iris image data comparing means, the current iris image data including the optical source noise is compared with the registration iris image data including the optical source noise.

33. The subject identification method according to claim 32,  
wherein, when the current iris image of the subject is captured using the imaging means, a shape, pattern, color, or combination thereof of the light source is updated to be changed; and

5 wherein, when the comparing step is performed by the iris image data comparing means, a shape, pattern, color, or combination thereof of the optical source noise of the registration iris image data used in the comparing step is changed according to the change in a shape, pattern, color, or combination thereof of the light source.

10 34. The subject identification method according to claim 33,  
wherein the light source is a display portion which performs displaying on a screen; and

wherein, when the shape, pattern, color, or combination thereof of the light source is updated to be changed, a shape, pattern, color, or combination  
15 thereof of a display drawn on the screen of the display portion is changed.

35. A subject identification system for identifying a subject using an imaging means, the subject identification system comprising:

a registration iris image data storing means for storing and registering an iris image of the subject captured in advance as registration iris image  
20 data;

a registration fingerprint image data storing means for storing and registering a fingerprint image of the subject captured in advance as registration fingerprint image data;

a current iris image obtaining means for capturing a current iris image  
25 of the subject using said imaging means to thereby generate current iris image data;

a current fingerprint image obtaining means for capturing a current fingerprint image of the subject using said imaging means to thereby generate current fingerprint image data;

30 an iris image data comparing means for comparing the current iris image data obtained by said current iris image obtaining means with the registration iris image data stored in said registration iris image data storing

means; and

a fingerprint image data comparing means for comparing the current fingerprint image data obtained by said current fingerprint image obtaining means with the registration fingerprint image data stored in said registration fingerprint image data storing means.

36. A program product for a computer to function as a subject identification system for identifying a subject using an imaging means, the subject identification system comprising:

a registration iris image data storing means for storing and registering an iris image of the subject captured in advance as registration iris image data;

a registration fingerprint image data storing means for storing and registering a fingerprint image of the subject captured in advance as registration fingerprint image data;

a current iris image obtaining means for capturing a current iris image of the subject using said imaging means to thereby generate current iris image data;

a current fingerprint image obtaining means for capturing a current fingerprint image of the subject using said imaging means to thereby generate current fingerprint image data;

an iris image data comparing means for comparing the current iris image data obtained by said current iris image obtaining means with the registration iris image data stored in said registration iris image data storing means; and

a fingerprint image data comparing means for comparing the current fingerprint image data obtained by said current fingerprint image obtaining means with the registration fingerprint image data stored in said registration fingerprint image data storing means.

37. A user authentication method for authenticating an identity of a user of one information terminal device when the user communicates via a network with a user of another information terminal device, the user authentication method comprising the steps of:

transmitting iris image data and/or fingerprint image data obtained by capturing by the one information terminal device an iris image and/or a fingerprint image of the user himself/herself of the one information terminal device with information which is an object of communication to the another information terminal device;

receiving by the another information terminal device the iris image data and/or the fingerprint image data transmitted with the information which is the object of communication from the one information terminal device and storing and registering the iris image data and/or the fingerprint image data as registration iris image data and/or registration fingerprint image data; and

comparing the received iris image data and/or the received fingerprint image data with the registration iris image data and/or the registration fingerprint image data to thereby authenticate an identity of the user of the one information terminal device based on a comparison result thereof when the iris image data and/or the fingerprint image data transmitted with the information which is the object of communication from the one information terminal device is received by the another information terminal device at a time a next and subsequent communication is performed.

38. A user authentication system for authenticating an identity of a user of one information terminal device when the user communicates via a network with a user of another information terminal device,

wherein said one information terminal device comprises:

an imaging means for capturing an iris image and/or a fingerprint image of the user;

an iris image data and/or fingerprint image data added information creating means for adding the iris image data and/or the fingerprint image data obtained by capturing by said imaging means to information which is an object of communication; and

an iris image data and/or fingerprint image data added information transmitting means for transmitting iris image data and/or fingerprint image data added information created by said iris image data and/or fingerprint image data added information creating means to said another information

terminal device, and

wherein said another information terminal device comprises:

an iris image data and/or fingerprint image data added information  
receiving means for receiving the iris image data and/or fingerprint image  
5 data added information transmitted from said one information terminal  
device;

a registration iris image data storing means and/or a registration  
fingerprint image data storing means for storing and registering as  
registration iris image data and/or registration fingerprint image data the iris  
10 image data and/or the fingerprint image data of the user himself/herself  
included in the iris image data and/or fingerprint image data added  
information received by said iris image data and/or fingerprint image data  
added information receiving means; and

an iris image data comparing means and/or a fingerprint image data  
15 comparing means for comparing iris image data and/or fingerprint image data  
included in the iris image data and/or fingerprint image data added  
information received by said iris image data and/or fingerprint image data  
added information receiving means with the registration iris image data  
stored in said registration iris image data storing means and/or the registration  
20 fingerprint image data stored in said registration fingerprint image data  
storing means at a time a next and subsequent communication is performed.

39. An information terminal device having a user authentication function  
for authenticating an identity of a user when the user communicates with  
another user via a network, the information terminal device comprising:

25 an imaging means for capturing an iris image and/or a fingerprint  
image of the user;

an iris image data and/or fingerprint image data added information  
creating means for adding the iris image data and/or the fingerprint image  
data obtained by capturing by said imaging means to information which is an  
30 object of communication;

an iris image data and/or fingerprint image data added information  
transmitting means for transmitting iris image data and/or fingerprint image

data added information created by said iris image data and/or fingerprint image data added information creating means to another information terminal device;

an iris image data and/or fingerprint image data added information  
5 receiving means for receiving iris image data and/or fingerprint image data added information transmitted from the another information terminal device;

a registration iris image data storing means and/or a registration fingerprint image data storing means for storing and registering as registration iris image data and/or registration fingerprint image data iris  
10 image data and/or fingerprint image data of a user himself/herself of the another information terminal device included in the iris image data and/or fingerprint image data added information received by said iris image data and/or fingerprint image data added information receiving means; and

an iris image data comparing means and/or a fingerprint image data  
15 comparing means for comparing iris image data and/or fingerprint image data included in the iris image data and/or fingerprint image data added information received by said iris image data and/or fingerprint image data added information receiving means with the registration iris image data stored in said registration iris image data storing means and/or the registration  
20 fingerprint image data stored in said registration fingerprint image data storing means at a time a next and subsequent communication is performed with the another information terminal device.

40. A program product for a computer to function as an information terminal device having a user authentication function for authenticating an  
25 identity of a user when the user communicates with another user via a network, the information terminal device comprising:

an imaging means for capturing an iris image and/or a fingerprint image of the user;

an iris image data and/or fingerprint image data added information  
30 creating means for adding the iris image data and/or the fingerprint image data obtained by capturing by said imaging means to information which is an object of communication;

an iris image data and/or fingerprint image data added information transmitting means for transmitting iris image data and/or fingerprint image data added information created by said iris image data and/or fingerprint image data added information creating means to another information terminal device;

an iris image data and/or fingerprint image data added information receiving means for receiving iris image data and/or fingerprint image data added information transmitted from the another information terminal device;

a registration iris image data storing means and/or a registration fingerprint image data storing means for storing and registering as registration iris image data and/or registration fingerprint image data iris image data and/or fingerprint image data of a user himself/herself of the another information terminal device included in the iris image data and/or fingerprint image data added information received by said iris image data and/or fingerprint image data added information receiving means; and

an iris image data comparing means and/or a fingerprint image data comparing means for comparing iris image data and/or fingerprint image data included in the iris image data and/or fingerprint image data added information received by said iris image data and/or fingerprint image data added information receiving means with the registration iris image data stored in said registration iris image data storing means and/or the registration fingerprint image data stored in said registration fingerprint image data storing means at a time a next and subsequent communication is performed with the another information terminal device.